GOV.UK Pay as a viable alternative e-payment provider

Discovery Outputs including User Research Report, Business Case and Recommendations

23 April 2019
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Overview of the Discovery

GOV.UK Pay has the potential to improve payment processes across local government, providing a better and more consistent experience for customers and a more efficient and cost effective service for finance, digital and operations teams.

Since opening up GOV.UK Pay to local authorities last year, there was enthusiasm from some teams but also reservations about how easy it would be to use and what the potential cost savings would be.

This Discovery aims to understand the potential benefits to the sector of GOV.UK Pay as well as the barriers to adoption, and recommend ways to make GOV.UK Pay easier to use. By outlining the economic benefits of GOV.UK Pay, identifying feature changes to the GOV.UK product and advocating for more open communication around this topic between local authorities, we think there are ways that payment processes can be improved across local government.

GOV.UK Pay Background

GOV.UK Pay is a platform created by the Government Digital Service (GDS) for making online payments using credit and debit cards and new features are planned.

It is currently used in 130+ services provided by Central and Local Government and other Public Sector organisations, such as the NHS and Police forces. The list of all current live services can be found here: https://www.gov.uk/performance/govuk-pay.

As of 23 April 2019, there have been over £128m of payments taken across 2.91m transactions.
GOV.UK Pay was opened up to local authorities in the summer of 2018 (GDS blog post about it here). As of 23 April 2019, there are now 32 local authorities using GOV.UK Pay for between approximately 1 and 5 services per local authority. So far no council has moved to GOV.UK Pay for all of its online payment services.

Many are now using GOV.UK Pay for Blue Badges - the Department for Transport (DfT) have designed a central Blue Badge application and management system that is available to local authorities to use, and have integrated the payments function of the new service with GOV.UK Pay.

GOV.UK Pay is free for councils and so has the potential to save Local Authorities money that we spend on online payment systems. There’s no cost for additional features eg. branding, and councils just pay the fees from the payment service provider (PSP) for each transaction. We knew that GOV.UK Pay had a feature-rich future roadmap that would continue to enhance customer experience and help with building better services such as Direct Debit and Apple Pay/Google Pay. We also knew the product would comply with current and future legislation for example
PCI/DSS, Payment Service Directive 2, or the new Accessibility regulations.

Other recent developments, triggered in part by the change to Blue Badges, include the procurement by GDS of a Payment Service Provider (PSP) to process the card payments. This opens up transaction fees negotiated centrally, based on larger volumes of transactions than could be achieved for a single Local Authority, with an immediate capability to take payments without waiting for merchant and account setup.

As a result, council adoption of GOV.UK Pay has been a top topic in discussions with peers and at recent events, particularly as using common components and a Government as a Platform (GaaP) solution is also in line with the Local Digital Declaration.

Although some councils used GOV.UK Pay for specific transactions, none have adopted GOV.UK Pay for all of its online services. It felt like there were barriers to adoption that didn’t appear as prevalent in central government such as council end of day / reconciliation processes and integration with income management and ledger products.

So the MHCLG Local Digital Fund felt like an enabler for a collaborative Discovery to understand what was required to make GOV.UK Pay a viable alternative to existing council e-payment providers.

**Local Digital Fund Discovery project**

North East Lincolnshire Council bid for funding from the MHCLG Local Digital Fund, in partnership with the GDS GOV.UK Pay team, Publica Group (Cotswold DC, Cheltenham Borough Council, West Oxfordshire DC and Forest of Dean DC) and Allerdale Council.

Our proposal was to collaborate and discover, through user research:

- benefits & savings of adopting GOV.UK Pay
- obstacles to adoption & how we might overcome them
- current & planned GOV.UK Pay features, how they may help LAs
• unmet needs around online payments or unusual LA payment models & appropriate changes to GOV.UK Pay that would help LAs
• collective key LAs e-payment & income product features
• user need & user stories around e-payments, income management and reconciliation
• changes to processes, thinking or models in reconciliation, eg how much of this is driven by habit rather than user need
• changes by established system vendors & their interest in supporting the LDD #fixtheplumbing aiming to drive the potential cost efficiencies of adopting GOV.UK Pay pan government as our primary income collection facility

We agreed as a project team that this could be achieved by a combination of:

• systems mapping around how money flows through a council
• interviewing users
• visiting councils to observe staff involved in managing payments, refunds and reconciliation, customer research
• speaking with council finance managers and ICT / digital teams
• gathering information about existing council e-payment systems and associated system and transaction costs through a survey.

The outcome planned for the discovery work was:

• a business case, outlining the potential costs and savings at scale across all local authorities from using GOV.UK Pay
• a user research report to demonstrate an understanding of different user needs and the process of taking and reconciling payments in a local authority
• a conclusion outlining recommendations for how GOV.UK Pay might meet these needs and detailing what changes or missing features may be needed in the existing GOV.UK Pay product to make it a viable alternative for councils to existing e-payment providers
Working together

Our work together started with the Agile for Teams training, provided by GDS through the LDD Fund. We struggled to find suitable dates to suit all collaborators, but some from the GOV.UK Pay team and Adam from Publica were able to attend the third day of training. We were able to incorporate the kick-off meeting into this day too.

We included people from the finance and ICT department in the training, so they could understand the way we would manage the project and hopefully change the way they work in their own teams afterwards.

We agreed on weekly stand-ups via Google Hangouts. We set up a Slack team for communication and a Trello board to manage the agile sprints and track progress. Some of the documents were produced collaboratively using Google Docs.

Fortnightly Show & Tells were used to keep stakeholders and interested parties up to date on progress and findings throughout the Discovery. These were broadcast Live on YouTube for those who couldn’t be present.
We also attended one of the MHCLG roadshows in Coventry, where we led an unconference session about the project, to engage more widely with other Local Authorities.

Here is a timeline of our Discovery activities. Information is available in spreadsheet form in Appendix 6:

**Timeline of Discovery activity**

**Acknowledgements**

In addition to the formal MHCLG project collaborators NELC, Publica, Allerdale and GDS GOV.UK Pay, we’d also like to thank the additional councils that helped inform our project and it’s outputs including:

- councils that completed our anonymous survey about existing council systems and costs
- councils that agreed to host research site visits including: Cherwell District Council, Southwark Council and Cotswold District Council
• councils that agreed to telephone research calls including: Oxford City Council, Leeds City Council, Clackmannanshire, Lincoln City Council
• Barnsley Council for hosting us on a research visit and sharing information about their in-house developed Income Management system
• Hackney Council for sharing the user stories from their local discovery work around GOV.UK Pay
1. User research report

Research goals

- Understand the landscape of Local Authority Income Management systems (IMS) and payment platforms:
  - What systems there are and how they are configured?
  - How are payments received, recorded and reconciled with the IMS?
  - What changes to GOV.UK Pay could potentially be made to better meet the council user needs?
- Determine whether the user needs of Local Authorities and their citizens are the same as those of Central Government, and whether GOV.UK Pay could meet them better than their incumbent systems
- Test our assumptions about how the interface design and brand affects confidence in completing transactions
- Gather data about transaction costs and other hidden costs to see if there is an economic or strategic case for change

We used a number of user research methods to learn about existing finance systems and user needs.

Income Management Systems and Payments-
Context and Problem

Since opening up GOV.UK Pay to local authorities in 2018, the team at GDS has been interested in how the product can offer more support to local authorities and make it easier to take payments. Local authorities had told GDS that their current payment platforms were often slow to set up, difficult to use, not meeting customer needs and expensive to customise. They were also often embedded in complex systems, which made it harder to change. GDS saw an opportunity for GOV.UK Pay to help local authorities but wanted to find out more.

GDS knew from previous engagement and research that digital and finance teams wanted to know how GOV.UK Pay would integrate with their income management systems, and how easy reconciliation would be
with a new payment platform. With in some cases a relatively fragile income management and financial process made up of several interdependent systems and suppliers, local authority teams wanted to be sure that there would be no disruption to the reconciliation process, and this hinged on the income management systems. Uncertainty on this was a barrier to adoption, and many ICT Development teams are stretched or may not have the capacity to create bespoke integrations. GOV.UK Pay can work alongside existing council systems so reconciliation can be completed. However some changes to existing processes, interfaces and integrations are likely to be necessary.

Objective
To understand the process of income reconciliation in local authorities, what tools they used, where GOV.UK Pay fit into the process, and whether there were opportunities to make reconciliation easier or other pain points that GOV.UK Pay could address.

Our approach
For the discovery to be successful we knew we’d need to understand what the most popular council income management and e-payment systems were so the North East Lincolnshire team stood up a poll on the LocalGov Digital Slack channels.

![Image of Slack poll](image-url)
We looked for and chose collaborators that used a range of key systems to provide a breadth of council types, e-payment and income management systems.

GDS and the team then arranged field visits to Cherwell District Council, Southwark Council, Cotswold District Council and Barnsley Council to:

- Observe and interview finance team members in local authorities to understand the process of reconciliation from the front end and observe behaviours and process. This included people that carry out day to day finance activities and decision makers who oversee financial activities and accounting.

- Observe and interview IT and systems managers to understand the process of reconciliation from the backend system, and review example file types and integration scripts.

At these field visits, GDS interviewed a total of 13 people, 7 people from finance teams and 6 people from digital teams.

GDS conducted additional research with ICT and transformation teams at Oxford City Council, Leeds City Council, Clackmannanshire, Lincoln City Council, who provided feedback on GOV.UK Pay, their current income management and reconciliation processes, and their requirements for a payment platform.

GDS also reviewed data we had gathered prior to this discovery from engagement meetings and research trips with a number of other local authorities over the past 6 months. This included local authorities who were using GOV.UK Pay, who were considering using GOV.UK Pay, and who had decided that GOV.UK Pay did not work within their current payments model.

The GDS team included the GOV.UK Pay product manager, user researcher, interaction designer, senior developer and engagement lead to ensure that there was a wide range of expertise in these conversations.
Summary of our research findings - from GOV.UK Pay

“Taking payments is the easy part, it’s matching them up which is the hard part” - Finance Manager

We (the GOV.UK Pay team at GDS) heard this before our discovery began, and through the course of our discovery have seen the reality of this.

In a nutshell, income management and reconciliation is:

- the process of matching expected income against actual income
- allocating actual income to paying users’ accounts (for example, to show that someone has paid their council tax)
- Matching actual income to ledger codes so LAs can balance their books and meet the requirements laid out in the Service Reporting Code of Practice (SeRCOP)

However, the process involves a maze of dependent systems - a simplified generic example is below:
And here are a couple of examples from the partner local authorities, developed after conversations with their finance and digital teams.

North East Lincolnshire Council:

Publica:

Transaction file that is downloaded to IMS - Civica (Local Element).

Civica (Cloud-based element) - for non online payments, e.g. cash, cheque.

Online Payment (Civica Pay)

Requires alpha-numeric verification for Account numbers and Invoice numbers. Needs to associate payment to Fund

EOD download file

If Online Payment system could allocate to Fund, then IMS could be bypassed.

Income Management System

Civica (Local element)

- online payments

- IMS used to assign payments from EOD file to Funds
Flat files vs. real time data

Finance typically uses flat files (CSV) rather than API. They don’t necessarily have a need for real time data and are used to working a day in arrears.

However case workers and operations team do have a need for real time data, for example so that they don’t send a follow up letter to someone who paid that morning, or so that they can answer questions when someone calls in about a payment they have made (and not have to ask a customer to call back a second time). Some local finance teams would prefer to access APIs but these are not always available via their current PSPs.

The right transaction data is key
Transaction data needs to include a unique reference, a description and a code to automatically allocate it to the correct cost centre (a ledger code, or fund code). Reconciliation effort increases when incoming payments are inaccurate or incomplete, which takes up more staff time.

If a payment doesn’t have the correct unique reference, it will fall into suspense. A finance officer will need to manually review each file in suspense, work out which account it relates to, and tag it to the right customer and the right cost centre. This can be a particular problem with payments where the user enters their reference number with no validation, for example, bank transfers, standing orders and cheques.

“We want to stop too many people from having to touch the files”
Automated processes are far preferable, as they are quicker, cheaper and avoid human error. An automated download of transactions across all services, on a set schedule, is preferred. Sometimes when a file isn’t generated, e.g. because it is a bank holiday and no-one is in the office to do it, the system breaks and IT has to be involved to fix it.

Timing is everything
Flat CSV files are generated by each system, every day, and sent to the other systems that need the info (see diagram). The timing is fixed for
each one - sometimes this is set by the service and sometimes by the supplier. As the systems are so interdependent, the right things need to be done in the right order, or the system breaks, e.g. “if I move something out of suspense after 5PM, the system breaks” Some of the timings are historical, and some are practical. Some LAs choose to run their 24h period from midnight to midnight, others have a cut-off at 5PM or 6PM.

“...line of dominoes of systems, if one falls over then it interrupts the flow of the rest” - Finance Manager

It is hard to configure settings in-house
Although the details of the settings (e.g. scheduled cut off times) are integral to reconciliation running smoothly, local authority teams don’t always have access to configure these settings themselves and set up automatic processes. They may have to pay the supplier to make the change. In some cases when they do have the scope to make amends, or write scripts to automate processes, they don’t have the time and people to do it.

“It’s hard to tweak the structure if reporting needs change” - Digital Manager

“We automated as much as we could about 7 years ago and since then I’ve not had the time to spend a few good weeks to look at what can be done, could we script here and there” - Applications Manager

Several third party systems are closed off, without accessible APIs, and it is difficult for local teams to manage integrations within systems - they have to be built by suppliers.

Quotes for access to APIs in a third party system commonly run into the tens of thousands of pounds, e.g. one Local Authority said they were quoted £60,000 for access to the APIs for a well-known Revenues and Benefits system.

Some payments are completely handled within third party systems
Some line of business systems handle payments in their own cloud-based systems; others process payments through the individual local authority’s
payment platform. The former can be expensive and difficult to integrate with.

**Telephone and card payments**
These are often provided by the same supplier, as part of one procurement lot. There might be a separate user interface for contact centre staff, where they can process payments and match it up to a customer’s account.

**It can be slow to get new payments online**
The ability to ‘get to market’ quickly is increasingly important, as more and more services see a benefit for customers and for the business of offering online payments. It can take time to integrate a new service with a payment platform, and to start taking payments online. This has a direct impact on the ease of access to services for users and the cash flow of the finance team.

**Compliance is difficult**
PCI DSS compliance can be complicated and expensive. Some teams find it easier to manage when they are only dealing with one supplier for online and telephone payments.

**Procurement is difficult and software provision is falling short**
The software and costs associated were generally described negatively by research participants. There is a small supplier market and local authorities can also be tied into long contracts with software providers. Operational processes are developed to deal with the shortcomings of the software, imposing a double cost burden on the local authority.

“It's a very small supplier market...and they do very little in terms of designing solutions around end-user requirements” ICT Manager

Some councils had created a large amount of bespoke code to get products to work effectively in their own environments despite having paid vendors a significant amount to develop their income processing.
“It is around 95% our code. The only parts we didn't write are the pre-configured screens in Income Management that take payments.” ICT Developer

Some systems do not have accessible APIs to make it easier to integrate reporting from a variety of sources and affects how creative and flexible local authorities can be in other areas of payment taking. This can result in some local authorities opting to buy all in one packages where payment taking and payment reconciliation are linked into the same software package, but where they may get less flexibility.

Transparency over the real costs of software issues and the impact on operational processes, make comparisons complicated.

High fees for upgrade and maintenance is also a massive constraint, for example one LA said they were charged £15k for upgrades, so they were only able to pay for upgrades every two years. Another had paid £75k each for two upgrades in three years.

However, some local authorities have built their own income management systems entirely in-house (like Barnsley) or were able to tailor existing systems, and in these cases the problems listed above markedly decreased. Having the ability to modify systems (for example, to set rules for automated reconciliation) also reduced reconciliation effort.

The decision makers on procurement vary - some LAs told us that IT are the decision makers on what software is procured; in other LAs business and finance teams are sold the products (rather than IT).

Service delivery choices
There are also issues created by the wide variety of payment types that local authorities choose to accept, and the need to balance making it easy for customers to pay with operationally efficient business practices. Some local authorities already restrict payment types so cash payments and cheques are not accepted.
Customer needs/benefits research

We had some assumptions about user preferences that needed to be tested so that we understand the impact on the economic and strategic case for GOV.UK Pay. We felt that we needed to establish whether using GOV.UK Pay would meet user needs of citizens that make payments online better than existing LA systems.

Objective

We formed some hypotheses around the assumptions we had. These were:

- GOV.UK is a more trusted brand than the local government payment systems
- The look and feel of GOV.UK Pay payment screen gives more confidence to users completing a transaction
- Having a payment system consistent with Central government payment systems provides a better user experience

Our approach

Between the partner LAs we ran several qualitative research sessions where users were interviewed about payment experiences and preferences. Some of this research was done with council staff, some with citizens at council buildings and away from council buildings.

This research centred on whether the people that are willing to pay for services through GOV.UK were the same people that would pay for things through a local authority website. Are their needs the same? Is GOV.UK a more trusted brand than local government websites? Could the presentation of the payment system have enough of an impact on user confidence to cause them to drop out of a transaction?

Methods used were attitudinal feedback, A/B testing and usability testing. This was designed as a way to gather thoughts and feelings around differing user experiences.
Summary of our research findings

User Confidence/Trust
At North East Lincolnshire Council (NELC), initial research was done with staff members. 18 users were asked about paying for things on GOV.UK, 17 had experience of using it for various things, including road tax, driving licences, renewing passports and child care. Feedback was overwhelmingly positive, with users finding it easy to use and straightforward.

It should be acknowledged that not all of these services use GOV.UK Pay, but they follow similar design patterns.

Further sessions were done with non-staff users at council buildings and at other locations. They were asked about their experiences of paying online. Out of 13 people interviewed, 30% said they never pay online, stating a lack of confidence or trust. We showed the remaining 9 users different images of payment screens from GOV.UK Pay, NELC, Cotswold District Council and Forest of Dean Council, asking for their views on each (Appendix 4). 89% would have the confidence to complete their transaction using GOV.UK Pay.

The user research / attitudinal testing confirmed that the e-payment interface does have an impact on user confidence around completing an online council task.

“I would prefer to pay using GOV.UK Pay system because I trust the branding & I know who I’m paying so it feels more secure” - NELC customer

“It’s known and trusted” - Publica customer

User Experience
At NELC it was suggested by users that the look and feel of GOV.UK Pay was familiar, and similar to other online payment screens seen in e-commerce. It was perceived to be clear, bold, more visually appealing and professional in appearance.
Research at Publica strongly echoed the findings at NELC. 15 users discussed the Cotswold District Council “Make a payment” page for Council Tax and the GOV.UK Pay page (Appendix 5). The Cotswold page received mixed feedback, receiving criticism for its design but the presence of the council logo inspired some confidence. The GOV.UK Pay page was perceived by all participants to be a simple and clearly laid out page which was easy to read and understand.

14 Publica users took part in an exercise comparing different payment screens. 100% of users preferred the GOV.UK Pay screens. This established a very strong preference for the GOV.UK Pay payment screen. Overall, 95% of users at both NELC and Publica said they preferred it. They identified the following features as the basis for expressed preference:

- visibility of payment summary
- types of payment card accepted
- clearer text, readability
- simple screen layout

These findings indicate that take up for online services that include a payment are likely to increase if councils adopt GOV.UK Pay.

From the research we produced a list of design features that users believe make a “good e-payments system”:

- it is clear about what you need to do
- it clearly tells me how much I am paying
- it is minimal with how much personal information it requires
- it feels secure, e.g. verified as secure by Google
- it has a familiar design and feel, similar to other online payments

Council needs/benefits research

Our research identified that council needs did differ significantly from central government needs in other ways, in particular the need for customer not present payments by telephone.

This was further affirmed as a council chose not to adopt GOV.UK Pay during this Discovery period citing the need to retain multi channel
payments including telephone for customer not present from a single provider as a key reason for their decision.

Our survey identified that councils handle 67,503 e-payments a year on average. Scaled across 416 local authorities using this could potentially bring almost another 19 million transactions into GOV.UK Pay each year if it was adopted by all councils.

Our research also identified a continuous increase in both transaction volumes and transaction fee rates during recent years, along with a trend away from phone payments via Contact Centre, towards internet payments.

User research at NELC and Publica also provided insight into what are the key features of a good e-payment system. We were able to produce some user stories to demonstrate the needs identified, for both end users and council users. These are listed in Appendix 1a. The user stories identified in our research echo many of the needs identified in separate Discovery work carried out at London Borough of Hackney - See Appendix 1b.

These user stories can broadly be categorised as:

- needs that are already met by GOV.UK Pay, e.g. use of a wide range of payment card types as research noted not everyone used Visa / Mastercard
- needs that will be met with planned roadmap features, e.g. the ability to hold financial codes to aid reconciliation within GOV.UK Pay
- unmet needs, e.g. the need to take credit or debit card payment by other channels such as IVR or chip and pin.

Central Government have a service by service model rather than a single payment team managing income for multiple services. This got us thinking about how much of the council reconciliation process was driven by habit and unsuitable ICT systems not geared to financial control vs. user needs.
Survey

We created a survey to be completed by Local Authority Finance/ICT teams. Given the nature of the information we were seeking, we expected there would be some difficulty in getting responses, due to the confidential nature of contracts.

To mitigate this, we designed it to be anonymous so that it would be impossible to deduce which Local Authority had completed it. We also made each question optional, recognising that the person filling the survey might not have all of the information available to them. We didn’t want them to give up because they couldn’t answer one question.

In the time available, we received 7 responses. The questions asked can be found in Appendix 2.

The insights gathered through the survey around the pain points Local Authorities have with procuring and running payment systems are summarised in Appendix 3, including the mitigation that GOV.UK Pay potentially offers.

The commercially sensitive nature of the information gathered means that it was shared with us on the basis that we would not share individual responses publicly.
2. Business case

How did we define the problem we were looking to solve?

We wanted to understand the costs of the whole process of taking and reconciling payments, including but not limited to transaction costs.

We were keen to know more about this as rough figures based on each of 416 councils no longer paying a nominal annual fee for their e-payment system suggested potential annual savings for the sector of around £4m.

Aside from the potential savings there was also the opportunity to provide a better and more consistent experience for customers when paying for any government service.

We wanted to better understand the national position around operational costs associated with existing council e-payment systems. And our ambition was to extend this understanding beyond just the partner councils within this discovery project.

We created a Google survey which we circulated by:

- LocalGov Digital Slack
- Twitter
- Promoting it at MHCLG Roadshow Coventry
- MHCLG Collaboration Unit newsletter

Our findings helped inform our Strategic Case as well as being the key to this Economic Case.

Economic Case

Based on the survey and conversations with individual local authorities, we identified current costs and operational pain points in the process of managing online payments. We then considered the way that GOV.UK
Pay could address these costs, and whether there were potential savings by using a common platform.

- **Procurement and licensing costs** - Local authorities have been estimated to spend around 8 months procuring new e-payment solutions, and around £14k a year on licencing costs, with £6k for training on a new system. In contrast, GOV.UK Pay charges no licencing costs and provides robust documentation and extensively tested interfaces to make it easier to integrate and easier for teams to use.

- **Transaction fees** - some local authorities were being charged over £1 per transaction. GOV.UK Pay offers competitive pricing via their centrally procured PSP, or LAs can bring their existing contract with one of the PSP's GOV.UK Pay supports. Services can switch between PSPs without any additional integration work, to allow them to secure the best rates at the time without needing to switch payment platform.

- **Change and support fees** - Local authorities have quoted being charged £5k to change a #hex colour code and replace a .JPG logo image, and up to £2k a year in support fees. In contrast, GOV.UK Pay charges no support fee despite providing 24/7 emergency support for its users, with no fees for custom branding. Local authorities can switch payment service providers within GOV.UK Pay without any additional integration work.

- **Upgrades and new features** - Local authorities might need to pay further costs to their online payments provider for additional modules such as refunds or Direct Debit. In contrast, there is no cost to new features with GOV.UK Pay and minimal or no additional integration needed, e.g. Direct Debit will require minimal additional integration work, and there will be no additional work to use Google Pay/Apple Pay. Local authorities are able to request changes and contribute to the product roadmap.

- **PCI DSS compliance** - While GOV.UK Pay is completely PCI DSS compliant, some payment providers charge their users a fee for this and reserve the right to increase the charge if the regulations change. Three of the survey respondents said they were being charged for PCI DSS compliance. The average fine levied for a small merchant for failure to be compliant is around £15k on top of any forensic investigation and remediation costs.¹

- **Refunds** - Local authorities estimate they spend between 2 and 7 hours a week manual processing refunds on their current payment providers. This is reduced using GOV.UK Pay with our easy refund functionality or refunds API, and there is no additional fee for refunds (only the rate of the selected PSP).

- **Reconciliation** - Local authorities estimate they can spend between 7 and 25 hours per week reconciling incorrect online and/or offline (e.g. cash, cheque)

¹ [https://ask.barclaycard.co.uk/business/allfaqs/1_fraud_security/fines_2](https://ask.barclaycard.co.uk/business/allfaqs/1_fraud_security/fines_2)
payment channels. Switching to GOV.UK Pay should help reduce this time, due to automated API or CSV reporting, and moving offline payments to online channels, and ability to start taking payments for smaller/ad hoc services using payment links.

- **Conversion rates and failure demand** - Users are less likely to complete a payment online if the user experience is bad, or the payment page is not trusted. 50% of local authorities surveyed reported that their e-payment screens were not responsive, with this increasing the chance of citizens making payments through offline channels, and so increasing costs of processing payments for local authorities. This contrasts with GOV.UK, which is fully responsive for all devices and which provides branded pages which are trusted by users.

- **Speed of getting new services live** - It is estimated that with the previous Blue Badge system, 60% of users would prefer to pay online but were unable to. A key reason for this inability may have been the difficulty of and time taken to get a service to take online payments. GOV.UK Pay provides an automatic one day onboarding process with new PSP, and comprehensive documentation to make integration easy for in-house team or suppliers. As of March 2019, 28 Blue Badge services had already enrolled with GOV.UK Pay.

- **Accessibility** - As of September 2020, all public sector websites and apps will need to meet the Public Sector Bodies (Websites and Mobile Applications) (No.2) Accessibility Regulations 2018. While GOV.UK Pay already meets these guidelines, 72% of survey respondents did not know whether their existing provider did so.

- **Real time data** - Many payment platforms do not provide real time data, which can create a cost for case workers and operations team, for example sending a follow up letter to someone who paid that morning, or being unable to answer questions when when someone calls in about a payment they have made (so the customer has to call back a second time).

Some of the costs above apply to each individual service, e.g. the costs of not having real time information or speed to get to market, and any service using GOV.UK Pay may benefit from savings in these areas. Some of the benefits, however, are only realised when a local authority moves all its services to GOV.UK Pay and no longer has to pay for payment pages from a third party.
Licencing costs

In the case of licencing costs, there are substantial potential savings if councils moved all their services to GOV.UK Pay and did not have to pay a supplier. Based on the survey, the average licencing costs are about £14,000 per year. If all 416 councils moved to GOV.UK Pay the annual savings for the sector based on the average vendor licensing cost figures alone could reach £6m. However as our survey noted that council e-payment contracts are typically 5 years this saving would take some years to achieve as shown in the following table:

<table>
<thead>
<tr>
<th>Year</th>
<th>Councils using GOV.UK Pay</th>
<th>Potential Annual Saving</th>
<th>Aggregated Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>83</td>
<td>£1,162,000</td>
<td>£1,162,000</td>
</tr>
<tr>
<td>Two</td>
<td>166</td>
<td>£2,322,400</td>
<td>£3,486,000</td>
</tr>
<tr>
<td>Three</td>
<td>249</td>
<td>£3,486,000</td>
<td>£6,972,000</td>
</tr>
<tr>
<td>Four</td>
<td>332</td>
<td>£4,648,000</td>
<td>£11,620,000</td>
</tr>
<tr>
<td>Five</td>
<td>416</td>
<td>£5,824,000</td>
<td>£17,444,000</td>
</tr>
</tbody>
</table>

This saving could increase as the councils that completed our survey noted they currently used between 1 and 5 e-payment systems each. As well as the licencing costs, there are training and support costs. However, there are vastly differing costing models across local authorities in locally negotiated transaction fees which could reduce this figure. Some councils are also charged by their existing vendors for amendments and changes to their existing product. This was noted within our survey and research as being a barrier to make changes to products - for example to use better features or update branding.

Transaction rates

Transaction costs with GOV.UK Pay’s centrally procured PSP may be cheaper than local authorities have currently negotiated - particularly as some are paying over £1 in total per transaction. In some cases, local authorities have very good existing relationships with PSPs and have cheaper rates. They can bring their own contract with Worldpay,
Smartpay and Barclays ePDQ, and get all the other economic and user benefits of using the GOV.UK Pay platform.

As more services move to GOV.UK Pay, there may be the opportunity for greater economies of scale and to negotiate even more competitive rates.

Our research indicated that decisions are predominantly based on transaction costs, perhaps as these are the easiest to compare. However, as shown above, local authorities incur many other costs when they take payments, and understanding the impact of these will help assess the best option for any new payment system. It may be, as is the case with some local authorities using GOV.UK Pay, that they would pay slightly higher transaction rates to use the central PSP, but would save money on procurement, integration, operational costs and channel shift which make it worthwhile.

Cost of change

The cost of changing to GOV.UK Pay will vary massively from council to council:

- Councils such as Barnsley and Lincoln have built their own in-house income management systems. This provides them with full control over their technical capabilities within their available resources.
- Councils such as NELC operate a hybrid model with lots of in-house customisation. This provides a flexible technical environment but it places an internal development overhead on any significant change.
- Some councils still rely entirely on vendors for any changes to integration. Which will increase their costs and also further restrict what can be done to the capabilities of their purchased products.
- There are substantially different operating models across councils, ranging from outsourcing, commissioning and partnership agreements. All of which need to take payments which may or may not be managed via the council’s income management arrangements.
Procurement

There would also be a time and financial saving from councils potentially not needing to regularly reprocure an e-payment system. From our survey responses the average length of an e-payment procurement is 8.5 months.

NELC spoke to one of their procurement specialists about what might be involved in the procurement of GOV.UK Pay as an e-payments solution, given that the product is free to use.

It was confirmed that it would not be necessary to go through a full procurement exercise, as one of the key reasons for the exercise is to provide assurance of value for money. However, there would likely be a need to ensure that there was a reasonable amount of competition around the Payment Service Provider (PSP) used.

If an LA is already in contract with one of the three PSPs, a procurement would not be necessary. If not, each LA would need to make their own comparison with the centrally procured PSP and their existing transaction fees and/or the other 3 PSPs that integrate. In either case, the PSP contract would need to be evaluated approximately every 4 years. If the total whole life cost exceeds £181,302, then there will be a need to undertake a procurement in line with the requirements of Public Contract Regulations 2015.

Note: Procurement rules are likely to vary from council to council.

Strategic Case

At scale, adoption of GOV.UK Pay by all 416 local authorities has the potential for significant financial benefits across the sector as per our Economic Case as well as an array of other benefits including:

Benefits for the sector

- Adoption of a common platform for all of government
- Development work can be more easily reused by other local authorities
● Potential for lower transaction costs due to economies of scale across the public sector
● Potential savings for LAs moving from commercial established e-payment providers to the free to use GOV.UK Pay platform
● Potential savings as we can encourage channel shift from expensive payment methods like cash/cheque for ad hoc payments through payment links or better online payment platforms that people prefer to use
  ○ Our user research noted that customers preferred the GOV.UK Pay interface to existing council e-payment providers.
  ○ It was also noted that customers would be more confident in competing transactions using GOV.UK Pay, which would be likely to increase the volume of online payments to councils
  ○ Improved roadmap for GOV.UK Pay as part of their continued improvement

Benefits for customers

● Consistent experience for customers making any government payments whether it’s Council Tax or Road Tax
● GOV.UK Pay is fully accessible and extensively user-tested
  ○ blog post about empathy lab visit
  ○ only 28% of councils that completed our survey were sure their e-payment system would meet the new accessibility legislation
  ○ 57% of those surveyed said their e-payment systems are not built using responsive design techniques
● GOV.UK Pay is fully compliant with all relevant UK legislation eg. PCI DSS and new 3DS requirements will be added soon
● GOV.UK is continually adding functionality based on user testing, so customers will get a better experience (e.g. Direct Debit, Apple Pay/Google Pay)
  ○ Support for a wide range of credit and debit cards which was noted as important in Publica’s user research as not everyone was a Visa or Mastercard customer
Benefits for system providers

- Opportunity to help #fixtheplumbing by adapting their products to make use of a common service pattern for income management/reconciliation
- Ensuring their product remains relevant for LA customers
- Creating services that are easier and cheaper for LAs to run
- Suppliers are much more likely to commit to #fixtheplumbing with the economies of scale in play that would come from a sector wide adoption of a common e-payment engine.

Our survey findings noted only a little over half of the councils that responded would be able to adopt GOV.UK Pay without the need for additional functionality or implementing additional products.

There are clear strategic opportunities for local government finance teams to work together. Helping them to:

- Share code
- Share best practice
- Build communities of practice
- Sharing custom reconciliation scripts
- Build better processes to reduce time spent on manual reconciliation (exceptions)
- Make it easier for LAs to use GOV.UK Pay with existing suppliers
- Make it easier to understand why GOV.UK Pay is beneficial for local teams

The full user research findings can be found in our User Research Report.
3. Recommendations and Next Steps

Recommendations for GOV.UK Pay - from GDS

As detailed in the previous section, GOV.UK Pay meets the user needs identified for reporting and income management including: clear, searchable, transaction reporting with useful information to resolve queries; reporting via API and CSV reports.

However, this Discovery revealed additional user needs within the payment taking process for local authorities and highlighted opportunities to make it easier for local authorities to use GOV.UK Pay and reduce the burden on income management and reconciliation processes. These are split into 6 categories:

- Make reconciliation easier
- Make reporting easier
- Accept multiple payment types
- Make it easier for LA to communicate with each other
- Make it easier for LAs to use Pay with existing suppliers
- Make it easier to understand why GOV.UK Pay is beneficial for local teams

The majority of the recommendations below would sit with GOV.UK Pay to implement, and several have already been added to the roadmap - see below for a list of next steps. Others require a collaborative approach and the support of local authorities to offer peer support and communicate with each other.

However, the recommendations below will not fix all of the pain points of financial processes in local government. Some of the issues identified in the research section above - such as supplier systems which don’t integrate with other software, functionality of individual income
management systems, or issues processing cash and cheques - lie outside of GOV.UK Pay’s remit to act on, but are important to flag.

It is important to state that these issues have not blocked many local authorities from adopting GOV.UK Pay and that through carefully considering the points of connection between various system they can use GOV.UK Pay to solve most of their needs.

Dorset said in their blog post about integrating with GOV.UK Pay that now “new services can be setup in less than a day to receive ePayments” and that they “have a process that takes the money received in our bank account, uses GOV.UK Pay to lookup what services that money was received for and automatically recharges the service budget(s) in our central finance system. We even have the ability for a customer to make a payment against a specific invoice that they have received from us, which will then be fed back into our finance system and pay against their account”. The GOV.UK Pay team has heard similar from West Somerset and Taunton, Rutland, and Bracknell Forest.

Therefore what GOV.UK Pay is interested in focusing on now, is how we can make it easier to get started using Pay to reduce some of the individual build work for each local authority.

Make reconciliation easier

Provide the ability to add more information to a payment to simplify reconciliation, e.g. fund or ledger codes

Problem:

- As a finance manager, I need my finance system to know what fund the payment belongs to, so that the money can be posted automatically to the correct ledger code.
- Money collected and paid out by local authorities needs to be accounted for through the income management and finance/ledger systems. This typically means being able to allocate a payment to a ‘fund code’ (e.g. the council tax fund code), and then inputting into the ledger using a ledger code.
What GOV.UK Pay offers now:

- GOV.UK Pay already has a field in the API for reference code and description; but we don’t have the facility to include additional reference codes related to income management processes, which are not exposed to the paying user.
- This means that each LA has to write their own script to allow payments to be categorised appropriately; this additional work is a barrier to some LAs to use Pay.

Recommendation:

- GOV.UK Pay will develop a feature to allow several fields of metadata to accompany transactions. Therefore fund codes, ledger codes and other data necessary for reconciling the transaction can be ‘input’ when creating a payment via the Create Payment API call. This feature will be complete in Q1 2019/20.
- Some services have mentioned the value of providing ‘shopping basket’ payments to users, e.g. paying for several items as one payment. We’re interested in working with LAs to investigate whether the metadata feature could support a shopping basket - where one payment is created with GOV.UK Pay but the metadata defines the constituent parts of the payment.
- All payments need to be reconciled regardless of the payment channel. So GOV.UK Pay will add metadata functionality to Direct Debit payments, and potentially payment links.

Make it easier to track transactions fees

Problem:

- *As a finance manager, I need to know how much I have been charged for transaction fees, so that I can reconcile the payout I received with the payout I expected.*
- GOV.UK Pay offers a contract with a payment service provider (PSP) which has been procured on behalf of public sector organisations. GOV.UK Pay takes on the responsibility for managing interactions between services using the contract and the PSP. This includes the payment of transaction fees, which will be deducted from individual
transactions (net settlement). As LAs increase the number of services using our platform, we want to make it easy to pay transaction fees, and to account for those transaction fees in their income management systems.

- Some services may charge transaction fees to a separate cost centre (e.g. general overhead), rather than offsetting it against the fund code which the transaction relates to.

What GOV.UK Pay offers now:

- GOV.UK Pay provides reporting which shows the gross amount of the transaction, the net amount (after transaction fees are deducted) and the transaction fee cost. This granular reporting will allow services to allocate the gross amount of transaction and transaction fees to separate cost centres/ funds.

Recommendation:

- GOV.UK Pay to create a monthly invoice of transaction fees (covering the previous month of fees). Initially this will likely be per service, but in the interest of reducing the number of invoices coming into a LA, this may want to be reduced to a single invoice.

Let a service know when a payment has been deposited into their bank account

Problem

- **As a finance manager, I need to know that a payment has been deposited into our account, so that I can complete necessary accounting activities.**

What GOV.UK Pay offers now:

- GOV.UK Pay shows real time ‘captured’ status (ie. when a payment has been approved and is in the process of being taken out of the payee’s account). There should not be a difference between ‘captured’ and ‘settled’ (ie when it has been deposited into the local authority’s bank account), however there may be an additional need to know when the payment has been settled.
Recommendation:

- GOV.UK Pay can look at using the API from our new central PSP to let users (finance teams and case management teams) know when a payment has been settled.
- In theory, showing the settled status of payments should obviate the need to reconcile expected income (captured payments) to actual income on bank statements (settled payments). This would remove a large swathe of income reconciliation activity. Captured payments which aren’t settled can be more easily identified as we can show which particular payment hasn’t been paid out. GOV.UK Pay are interested in working with LAs further who want to streamline their current reconciliation processes by using the settled status.
- GOV.UK Pay to match transactions to payouts on the admin tool
- GOV.UK Pay to show (on the admin tool) payments which were captured more than 2 days ago but have not been settled, so they can be quickly identified and investigated.

Add validation rules for payment links

Problem:

- As a service owner, I need each payment to have the correct reference number, so that the payment can be automatically matched up to the correct customer account.
- As a finance manager, I need each payment to have the correct reference number, so that the payment can be automatically matched up to the correct cost centre.
- If a user enters a reference code incorrectly, their payment cannot be automatically reconciled, and will fall into suspense. Manually allocating all the suspense files to the correct account is time consuming, so LAs are keen to reduce the number of invalid entries.

What GOV.UK Pay offers now:

- GOV.UK Pay offers payments links, which allow services to easily and quickly set up payment pages without integrating with GOV.UK
Pay’s API. As the payment links are not part of an existing online digital service journey, the user is required to enter their own reference code to make a payment. (This does not apply to our full integration with Pay, as in that case the reference number is provided by the local authority’s own service pages).

Recommendation:

- GOV.UK Pay to iterate payment links so services can specify basic validation for reference numbers entered on payment links.

**Make it easier to manage VAT reporting**

**Problem:**

- *As a finance manager, I need to be able to easily generate a VAT receipt, so that I don’t have to spend a lot of time manually creating one or tracking down the correct info.*

**Recommendation:**

- GOV.UK Pay does not offer support for VAT reporting or VAT receipts. Do further research on the user needs in this area so that we can identify the best way for GOV.UK Pay to support.

**Make reporting easier**

**Make our CSV file more flexible**

**Problem:**

- *As a digital manager, I need to easily extract transaction reports in such a way that fits with current end of day processes, and is robust, so that I can automate end of day file transfer processes, and not worry about this process breaking*
- *As a finance manager, I need transaction reports available at the start of each day, so that I can get on with my work without interruption caused by files not being available*
- Typically, local authority finance systems revolve around moving flat files (CSV) between systems. It is important that each file is in place
at a specified time, so that a system looking for it can find it. If the file isn’t there, the process breaks down. Sometimes, the process requires a person to manually download or upload a file.

- Some local authorities have developed scripts to automatically extract and download CSVs reports from the GOV.UK Pay admin tool. While we applaud this initiative, it reflects a user need which should be covered by functionality offered by GOV.UK Pay.

**What GOV.UK Pay offers now:**

- Transaction reporting is available via a CSV download (triggered by the local authority) or via the API.

**Recommendation:**

- GOV.UK Pay will create a feature allowing the scheduled download of the CSV file. We would aim to make the time of day configurable so that local authorities can build this into their own processes and choose what works best for them. There isn’t a standard time across finance teams for this, because of the other processes built around it. E.g. some teams might want to download a day’s transactions at midnight, others might want a download the last 24 hours of transactions at 5PM.

- Other feature enhancements for the GOV.UK Pay team to introduce could include:
  - Automating the CSV download to a secure FTP site
  - Allowing access to the CSV file via an API.
  - Allowing the local authority to choose which fields they want to import from the CSV, and in what order.

**Research multi-service reporting needs**

**Problem:**

- *As a service owner, I need to be able to see the status of transactions across multiple services, so that I can do reporting at an aggregate level*
• As a finance manager, I need to see actionable information in one place, so that I can easily identify where to focus my efforts

• As local authorities scale up the number of services using GOV.UK Pay, their needs on reporting on single and multiple services on the platform may change. Having actionable information (e.g. chargebacks, unsettled income etc) in one central dashboard will be easier than looking on each separate service

• If LAs use GOV.UK Pay for multiple services, it might be preferable to retrieve one daily report into the Income Management system rather than several separate reports

What GOV.UK Pay offers now:

• Reporting via CSV and API for each individual service, which can be integrated into the current income management system the local authority uses for multi-payment channel and multi-service reporting.

Recommendation:

• GOV.UK Pay to do more research on the benefits of being able to run reports and generate CSV files across multiple services.

Accept multiple payments types

Add additional payment channels to GOV.UK Pay

Problem:

• As a finance manager, it’s easier if transactions from different channels are in one place so I don’t need to use multiple systems to manage reporting and refunds.

• As a digital manager, I need to manage fewer integrations for different payment types, so I can focus on improving other areas of service delivery.

• As a procurement manager, I want more of my transactions to go through a single provider (rather than being split between multiple
providers), so that I benefit from our economies of scale and secure cheaper rates

What GOV.UK offers now:

- GOV.UK can process credit and debit cards, and direct debit payments.
- Services can use GOV.UK Pay for phone payments, where the agent is entering the card numbers manually.
- GOV.UK Pay has a unified API. This means using additional payment types requires very little or no extra integration.

Recommendation:

- GOV.UK Pay to procure a telephone payment provider so that local authorities can take IVR (interactive voice response) or DTMF-suppressed payments (when the customer calls in, speaks to an agent, and during the call the customer types their card details into their phone keypad, and the phone system suppresses the sound of the touch tone keys) through GOV.UK Pay.
- GOV.UK Pay to procure a chip and pin provider, so that local authorities can take payments at kiosks / contact centre terminals through GOV.UK Pay.

Reduce the number of payment methods that generate suspense files

Problem:

- As a finance manager, I need to reduce the number of transactions with an incorrect reference which end up in the suspense file, so that I reduce the amount of time-consuming (and costly) manual work required for individual reconciliation.
- A number of payment methods rely on users to enter their reference number, eg. standing orders, BACS transfers, cheques; but local authorities want to keep these payments in order to make it easy for customers to pay.

What GOV.UK Pay offers now:
• When customers are directed to GOV.UK Pay, the reference number is completed for them, so these payments would not fall into suspense. The only exception is with payment links, where the user does enter their own reference number. As stated above, we would look to add validation to these reference codes.

• Where services only accept offline payment methods which are harder to reconcile (cheques, cash etc), due to not having online pages, services could utilise payment links functionality to reduce the prevalence of this payment type.

• GOV.UK Pay will also offer Direct Debit from Q2 2019/20.

Recommendation:

• Local authorities will need to balance the needs of users (having the choice to pay by multiple methods) with their business needs (the cost of accepting and processing certain types of payments). However, can GOV.UK Pay look at making the options that business prefer, so easy to use that customers prefer to use them too?

• GOV.UK Pay will soon be offering Direct Debit payments. Are there further things that we can do to make Direct Debit so easy to use that customers prefer this to a standing order? Additional customer research may be required to understand why customers choose one over the other.

• Could GOV.UK use open banking APIs to replace BACS transfers? This would allow the local authority service to set the reference number on a transaction (so that they could be automatically reconciled and would not fall into suspense due to incorrect references). Would customers and businesses prefer to use APIs? Open banking transfers are likely to be more expensive; would this be cost prohibitive for local authorities? Additional research would be required to understand if there is a market for this among customers or local authority users.

• Can local authority teams give greater visibility to operations, finance and digital teams on the effect on the end-to-end service and costs associated with taking multiple payment types, so that it’s
clear to teams setting up new services what the impact of accepting certain payment channels is on operational processes, e.g. is the form clear about which reference number to enter on a BACs transfer or is it generating a lot of transfers which have to manually reconciled? Is the additional reconciliation time needed to process payments factored into service decisions?

Make communication between LAs easier

Share details of integration with income management systems

Problem:

- As a digital manager, I need to build an integration to take transaction data from GOV.UK Pay into my income management system, so that transactions can be logged on our ledger and case management systems. I have the scope to write the scripts but I don’t have the time.
- Each local authority will need to build their own integration; some teams are very stretched and this may be an obstacle to easily adopting GOV.UK Pay.

What GOV.UK Pay offers now:

- All of our transaction reporting is available via CSV and API. Detailed information about both files is in our documentation, however it is not specific with regards to the type of build or script needed to integrate with the main income management systems used by local authorities.
- One local authority (Cherwell and South Northamptonshire) have shared their script for integration with Capita, and we have passed that on to other users to help them with their integration.

Recommendation:

- GOV.UK Pay, with the support of some local pay champions, to create a user group for sharing integration information between LAs and offer peer support and guidance. This could be a repository on Github. Information shared could be:
○ Integration with Capita, Civica, Adelante, SAP
○ How services have set up their own validation of reference numbers
○ How services are using a ‘shopping basket’ functionality on their service pages

Share details of set up of income management systems

Problem:

- As an IT manager, I need to know exactly what specifications to give to our income management supplier so that they can build it for us correctly, first time.
- The main income management systems come as a ‘shell’ which needs to be built for each local authority. The local authority provides the specifications, and the supplier will build it; if something is missing or incorrect in the specifications, the supplier will build it anyway, and then the local authority will need to pay to correct it later.

Recommendation:

- As part of the user group, encourage IT teams to share their suggested build specifications with other users, and open a dialogue with other users about the type of features and functionality that they have found helpful.

Share details of alternative income management systems

Problem:

- As a finance manager, I need more income management options to choose from, so that I am confident I am paying for the product that meets my needs, without a lot of additional expensive development work.
- Local authorities purchase IM products which come with some pre-configured functions and designs, but usually involve a lot of customisation. E.g. one local authority estimated that their IM
system was about 95% their own code. There are not many options available on the market.

Recommendation:

- A small number of local authorities have built their own income management systems, because it was either cheaper to do so or meant that they had a product that met their needs, or both. One of these, Barnsley Council, expressed an interest in sharing what they had learnt with other local authorities - read the full blog post here. This has great potential to provide an effective low cost solution to local authorities.

  “We’re absolutely thrilled with it and in the fullness of time would love to open it up for other local authorities to consider using.... Should we open source it on GitHub or multi-tenant it and run it as a SaaS offer in the cloud? Perhaps if we open sourced it, others could work with us to turn it into a multi-tenanted SaaS offer? Perhaps other council’s would just like to take a copy in return for providing operational feedback?” - Richard Kingston, Barnsley Council

- MHCLG could consider supporting the development of this IM system further, so that it can be available either as open-source or SaaS product. From this research with LAs, GDS are aware of some other digital teams who would be interested in supporting this work in an Alpha phase.

- GOV.UK Pay can work with Barnsley’s team to look at the integration with Pay so that it meets LA’s requirements for easy reconciliation.

Sharing info on procurements

Problem:

- As a procurement manager, I need to prepare the best possible tenders so that I can secure the best deal for my local authority.

Recommendation:
● Work with LAs to share information on what they include in their tenders for income management, payment platforms, line of business systems and additional suppliers. For example,
  ○ Some LAs are looking at breaking their tender down into more flexible separate lots rather than a single lot - sharing their experience in this might be useful for other local authorities.
  ○ Can LAs include a requirement in future tenders that systems are compatible with GOV.UK Pay? Additional demand, alongside GOV.UK Pay’s own engagement, could spur suppliers to build integrations.

Help LAs to quantify their own costs and costs of failure demand

Problem:

● As a finance manager, I need to know what all the costs are of the current financial systems, so I can compare alternative options more accurately.

Recommendation:

● GOV.UK Pay, with the support of local Pay champions, to encourage and facilitate local authorities to share information about the costs they incur with their current financial systems. Some of this is covered in the business case section of this report, but more information could be shared between local authorities. e.g.
  ○ Licensing costs
  ○ Cost to do a refund
  ○ Cost of not being PCI compliant
  ○ Value to service teams of having real time info to prevent unnecessary inquiries from or follow up to customers
  ○ Value to service teams of being able to get a service live quickly
● Enable local authorities to be able to share their business cases for moving to GOV.UK Pay
● GOV.UK Pay to work with services to develop case studies of how they are using Pay and what benefits they have seen
● Any GOV.UK Pay user group should include finance teams as well as digital teams, to allow finance teams to talk to and share info with each other.

Make it easier for LAs to use Pay with existing suppliers

Pursue integrations with third party suppliers

Problem:

● **As a finance manager, I want all my transactions to go through the same payment service provider, so that I can benefit from the economies of scale for all my payments.**
● **As a digital manager, I want additional suppliers and line of business systems to integrate with a single payment platform, so I have fewer reports to handle and fewer integrations to manage between systems.**
● **As a user, I want a consistent and trusted experience when I make a payment to my local council, regardless of which service I’m accessing.**
● **Some line of business systems or third party suppliers have their own separate systems for processing payments or integrations with other payment gateways, e.g. revenue and benefits or booking systems. As the systems are entirely owned by the supplier, local IT teams cannot reroute payments to their own preferred gateway, and rely on using the one selected by the supplier. This means that the pages for different payments at the same local authority look different to each other, and the local authority is spreading out its volume of payments across lots of different suppliers.**

What GOV.UK Pay offers:

● **There are already integrations with some form builder and CMS systems, which direct the customer to GOV.UK Pay at the point of payment.**
We have had some contact with income management system suppliers and are open to further dialogue with them, and we’ve spoken to other suppliers to local authorities as well.

Recommendation:

- GOV.UK Pay to engage further with suppliers about building integrations. This suppliers would include:
  - Suppliers of whole systems, e.g. revenues and benefits, booking systems, planning applications, parking systems.
  - Consultants designing new services, e.g. a new licensing service, could use GOV.UK Pay to take the payment.

- Engagement could include:
  - Working with MHCLG/TechUK
  - Working with Digital Marketplace
  - Running sessions for suppliers when we visit trade shows (e.g. Public Sector Show, where many other suppliers are in attendance)
  - Running regional events aimed at suppliers
  - Blogging about working with suppliers
  - Speaking to suppliers to better understand their needs and how GOV.UK Pay can help them.

Make it easier to understand why GOV.UK Pay is beneficial for local teams

Problem:

- As a business analyst, I need to understand all the features of GOV.UK Pay and where it sits in the payment journey, so I can assess whether it meets our needs and how it works with our other systems.
- GOV.UK Pay isn’t exactly a like-for-like substitute for some of the other options LAs are using or are on the market, e.g. we aren’t a PSP but we do support integration with PSPs, we aren’t Google/Apple Pay but we can support payments made through that service, we aren’t an income management systems but we can
provide some reporting and export structured data that could go straight into a ledger or case management or into an IM system. We are a government service rather than a private supplier, but we are meeting some of the needs provided by third party suppliers at the moment. This can make it complicated to see exactly where GOV.UK Pay sits in the payment process and what the benefits of it are, compared to and alongside other systems.

What GOV.UK Pay offers now:

- GOV.UK Pay has product pages and detailed documentation.

Recommendation

- GOV.UK Pay to review the product pages to ensure we are communicating as clearly as possible to readers who are not specialist in payment processes how GOV.UK Pay works, and make sure we do not assume too much technical knowledge on the part of the reader. Clearly outline the features and benefits for IT, finance and service teams. These are detailed in the previous business case and user needs sections, and include (but not limited to):
  - Ability to get to market quickly
  - PCI compliant
  - Resilient, particularly important when building in to systems that require everything to happen in a certain order, at a particular time
  - Real time data

What’s next?

GDS and GOV.UK Pay

GOV.UK Pay's roadmap and product development is based on research with, and feedback from users - with improvements to the products based on the needs of our users. Therefore, GDS are planning to make many of the feature changes outlined in the recommendations above to address
the new user needs highlighted by this discovery work with local authorities.

The product changes lie within GDS’s remit, and no further support is required from MHCLG. Ongoing feedback and testing with local authorities will continue. Some of the activities around a new user group for GOV.UK Pay, the sharing of information between LAs and outreach to suppliers could be supported by MHCLG and GOV.UK Pay champions among local teams.

**New features for GOV.UK Pay**

The current roadmap for GOV.UK Pay is published on the product pages: [https://www.payments.service.gov.uk/roadmap](https://www.payments.service.gov.uk/roadmap)

In terms of the next quarters, GOV.UK Pay will be working on the following features:

<table>
<thead>
<tr>
<th>When</th>
<th>Expected feature delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 2019-2020</td>
<td>Billing information for central PSP Metadata Direct Debit</td>
</tr>
<tr>
<td>Q2 2019-2020</td>
<td>Scheduled CSV downloads Reporting across multiple services</td>
</tr>
</tbody>
</table>

To be added to the roadmap (timing to be confirmed)

- Showing when payments have been settled/deposited into a bank account
- Validation for payment links

The other user needs from the discovery will be taken into consideration as the roadmap for later quarters is established; in particular telephone payments may be of particular benefit for local authorities so more research may be required here.

**Other activities for 2019/2020**
● Create a GOV.UK Pay user group, Github repository and library of architecture/integration patterns
● Developing robust feature pages that clearly explain the benefits of Pay, alongside opportunities to read business cases and case studies from other LAs
● Outreach to suppliers

Areas for further research

● Telephone reporting
● VAT reporting user needs
● Multi-service reporting user needs

North East Lincolnshire Council

The purpose of doing a Discovery on GOV.UK Pay was to understand the user needs that could be met by the payment platform and where it could fit into our digital transactions. What we have learned by working on the Discovery and closely with the GOV.UK Pay team has achieved this aim.

We believe there is a lot of potential to improve user experience and future proof our payments infrastructure by using GOV.UK Pay. We are also excited to learn more about the IMS developed by Barnsley and the possibilities that could open up if it can be shared with other Local Authorities.

Our short term goals for using what we have learned are:

● We intend to use GOV.UK Pay for Blue badge applications at the point of request
● We plan to explore use of GOV.UK Payment Links for a high volume council service
● We plan to explore use of GOV.UK Pay API as part of an integrated transaction using an eform, balance lookup and payment
● Arrange a demonstration of Barnsley’s IMS to our finance/ICT officers and other interested LAs, to gauge interest in bidding for MHCLG Alpha funding, alongside Barnsley MBC and GOV.UK Pay
We feel this will provide robust assurance that GOV.UK Pay could become a viable alternative all our online council online payment services regardless of complexity. And we feel that this may be a good way for other councils to understand whether GOV.UK Pay is right for them too.

Publica Group

We will explore integrating GOV.UK Pay API into a suite of new online forms as part of a wider digital transformation project during 2019 but payments would be limited to a small pilot area and discreet fund.

Allerdale

Allerdale cannot commit to any further work involving GOV.UK Pay at this time, due to a lack of available resources and higher priority work.

MHCLG

Many of the recommendations in the report will be addressed by GOV.UK Pay and no additional funding or work is required from MHCLG for these.

There is an opportunity to continue their work facilitating outreach to suppliers, and continue supporting better communications between local authorities on the subject of payments.

Several of the teams involved in our research voiced their concern that the available income management systems were options were limited and unsatisfactory. The research also found that some local authorities had built their own income management system, and at least one of them, Barnsley, was interested in ways of opening this up to other local teams.

There is an opportunity for MHCLG to fund further work on Barnsley’s income management system to enable it to be tested by other LAs.

Opportunities for Alpha - Income Management System

In the course of our research, we identified multiple problems with existing income management systems, such as:
• Not having accessible APIs (or paying significant sums to use them), so is not possible to seamlessly integrate the IM system with other systems. Files have to be ingested into these systems. This in turn makes it harder to do real time reporting.
• The expense of licencing costs and upgrades
• Paying vendors for software which is actually largely configured by local authority service teams
• Inability to fine tune system
• High levels of manual inputs into system, double keying of data
• System being inaccurate in matching data; high levels of manual checking
• Training costs - staff have to know how to use income management system safely
• Difficult to use and easy to make mistakes
• Unfriendly user interfaces

Poor, inflexible income management systems contribute to bad user experience for citizens and impose heavier operational burdens on finance teams. This leads to a double cost - software costs, and higher than necessary staffing costs.

The relative lack of competition in this market makes it likely that there is little impetus to address these problems.

However, as discussed earlier in the report, Barnsley Metropolitan Council have broken the mould by developing their own income management system.

We did some research with Barnsley and found that:

• The solution was co-designed by their finance team, so user needs are at the forefront of their product
• Their finance team are very happy with the product and are empowered to customise it where they find opportunities for more automation
• There is a positive, dynamic relationship between the finance team and digital team
● The system supports the finance team to operate at a lower headcount imposed by budget constraints

Barnsley’s system met their user needs and addressed several of the issues we saw in other systems, including:

● Uses APIs so easy to integrate with other systems, and have real time data
● Lower cost: saves £50,000 per year on software costs alone
● Only manual work required is reconciling payments in suspense file. Scripts and rules can be introduced to automatically reconcile common errors in payment references.
● Simple user interface: minimum training required.
● Flexibility: Easy to move money between fund accounts (for example, if a customer intended to make a payment for council tax but paid it to rent instead), can search across a range of parameters to locate payments, offers additional searching functionality (for example, search across what comes in bank transfer file).
● Speed: easy to search and results are returned rapidly.
● Safety and reliability: provides check facility when moving money around to minimise mistakes, notes can be added against suspense items to assist finance with identifying transactions. No manual inputs, no double keying.
● Less software: system can be used by contact centre staff and finance team

Initial analysis by the team at Barnsley suggests that their income management system could work with GOV.UK Pay. Furthermore, Barnsley are interested in making their system more widely available to other local authorities, and already have experience running a SaaS product for use by other local authorities.

GOV.UK Pay and Barnsley’ Income Management system is potentially a powerful combination. We have seen in this report that GOV.UK Pay broadly offers the functionality that local authorities need to take and manage online payments. But we recognise that GOV.UK Pay can’t solve the whole puzzle of managing payments, since local authorities need income management systems, and the ability to manage payments well
depends on those income management systems working well. Barnsley’s system appears to offer a great solution. It’s exciting to see a product made by a local authority, for local authorities.

With the two in tandem, the offering is compelling:

- online payments with simple integration which meet the Digital Service Standard (or no integration if using payment links)
- a simple, powerful income management system
- ready procured Payment Service Provider contracts
- responsive and collaborative service delivery teams
- free or low cost software

We recommend that Barnsley’s in-house income management system should be developed further, either as open-source code or a SaaS product. We would like to identify and work with local authorities who are interested in piloting this system.

Read more here: https://kingstonrichard.uk/blog/we-built-our-own-income-management-solution/

What does doing nothing look like?

What if the process for taking payments doesn’t change?

- Doing nothing continues the status quo and does nothing to break the lock-in around particular suppliers and the continuous upheaval of the procurement cycle driven through current rules.
- There is significant pressure on finance professionals, managers and business support functions to mitigate software problems with manual or cumbersome operational processes.

What if MHCLG does nothing?

- One ask of MHCLG is to consider supporting the development of an alternative income management system. If there are no changes in this field, then local authorities will continue to be reliant on third party suppliers to improve the status quo.
The other is to support communications between LAs and with suppliers on these issues. This is already something MHCLG is doing; if they stopped being actively involved the burden for coordinating this would fall to local digital teams themselves or to central government organisations like GDS and it may lose its momentum.

What if GOV.UK Pay does nothing?

- Local authorities can use GOV.UK Pay successfully as it currently stands. If no further changes were made, they would still be able to use GOV.UK Pay, it would just require more integration work by each team or a different approach to procurement (e.g. getting online and telephone payments from different suppliers). This however may be a barrier to some teams to adopt GOV.UK Pay.
- GOV.UK Pay has already committed to making some of the recommended changes and they are on the roadmap. Other changes, such as telephone payments, may be added later after additional research.

The option longer term to develop GaaP solutions such as GOV.UK Pay seems the more sensible approach bringing stability to the government marketplace, reducing massive overhead for 416 councils constantly implementing new systems and sapping capacity from business as usual.

Conclusion

Framework for understanding economic benefits to local authorities

We have found economic, sector and user benefits to local authorities using GOV.UK Pay. Some of these benefits apply to a single service; some are realised only when a local authority moves all of their services to GOV.UK Pay.

However, ultimately each council’s business case will be different, based on their:

- Existing annual vendor costs
● Locally negotiated transaction fee rates
● Hidden ongoing costs around operating and modifying their existing system
● Cost of change

We hope that the list of potential costs outlined in the Economic Case helps provide a framework for local procurement, finance and digital teams to consider the costs of their current payment processes and allow a comparison with GOV.UK Pay.

Feature changes to make GOV.UK Pay easier to use
Services can use GOV.UK Pay as it is now, and many (30+) are. However, the discovery has revealed some additional needs of local authorities. Each LA can meet these user needs as part of their custom integration work, but with limited time, money and staff it’s hard to make this happen.

So GOV.UK Pay will work on adding features to meet these user needs, to make it easier for LAs to use Pay in the future. We feel that this Discovery has been really useful in helping to inform the development roadmap for GOV.UK Pay. The proposed changes will go a long way towards meeting the Local Government specific needs identified and overcome the barriers to adoption we found.

A potential Alpha to improve Income Management in local authorities
We have identified a potential Alpha which could improve the process of managing income. While not directly related to GOV.UK Pay, a better income management system could improve the payment taking process, save money for local authorities and enable services to use GOV.UK Pay more easily.
Authors

This Discovery report was written collaboratively by North East Lincolnshire Council, GDS GOV.UK Pay team and Publica (Cotswold DC, West Oxfordshire DC and Forest of Dean DC). Individual contributors were:

- Dave Morton, David Ferguson and Gary Dunn (NELC)
- Miriam Raines, Katie Bates, Conor Delahunty and Jeba Starkie (GDS GOV.UK Pay)
- Sarah Turner (Publica)
Appendices

Appendix 1a - User Needs identified from our Discovery

Our discovery work identified the following user stories, split between those of people who use payment services to pay for services, and those of people involved in providing, managing and administering those services.

End User Experience

- As a user making a payment, I want to give as little information as possible, so I can complete my transaction quickly
- As a user making a payment, I want a simple and intuitive interface that’s consistent with what I use on the internet, so that I can successfully complete my payment
- As a user making a payment, I want the interface to have a trusted brand, so that I can feel confident in making my payment
- As a user making a payment, I need to be clearly shown how much I am paying and what for, so I can confidently proceed with my transaction
- As a user making a payment, I need to know what types of card I can use to make a payment, so I know if my card will be accepted
- As a user making a payment, I need to make sure my council tax payment is credited to my account, so I don’t pay someone else’s by mistake

Technical (Income Management System integration and processes)

- As a finance manager, I need my finance system to know what fund the payment belongs to, so that the money can be posted automatically to the correct ledger code
• As a finance manager, I need to know how much I have been charged for transaction fees, so that I can reconcile the payout I received with the payout I expected.
• As a finance manager, I need to know that a payment has been deposited into our account, so that I can complete necessary accounting activities.
• As a finance manager, it’s easier if transactions from different channels are in one place so I don’t need to use multiple systems to manage reporting and refunds.
• As a finance manager, I need each payment to have the correct reference number, so that the payment can be automatically matched up to the correct cost centre.
• As a finance manager, I need to be able to easily generate a VAT receipt, so that I don’t have to spend a lot of time manually creating one or tracking down the correct info.
• As a finance manager, I need to see actionable information in one place, so that I can easily identify where to focus my efforts.
• As a finance manager, I need transaction reports available at the start of each day, so that I can get on with my work without interruption caused by files not being available.
• As a finance manager, I need to reduce the number of transactions with an incorrect reference which end up in the suspense file, so that I reduce the amount of time-consuming (and costly) manual work required for individual reconciliation.
• As a finance manager, I need more income management options to choose from, so that I am confident I am paying for the product that meets my needs, without a lot of additional expensive development work.
• As a finance manager, I need to know what all the costs are of the current financial systems, so I can compare alternative options more accurately.
• As a finance manager, I want all my transactions to go through the same payment service provider, so that I can benefit from the economies of scale for all my payments.
● As a service owner, I need to be able to see the status of transactions across multiple services, so that I can do reporting at an aggregate level.

● As a service owner, I need each payment to have the correct reference number, so that the payment can be automatically matched up to the correct customer account.

● As a digital manager, I need to manage fewer integrations for different payment types, so I can focus on improving other areas of service delivery.

● As a digital manager, I need to build an integration to take transaction data from GOV.UK Pay into my income management system, so that transactions can be logged on our ledger and case management systems. I have the scope to write the scripts but I don’t have the time.

● As a digital manager, I want additional suppliers and line of business systems to integrate with a single platform, so I have fewer reports to handle and fewer integrations to manage between systems.

● As a digital manager, I need to easily extract transaction reports in such a way that fits with current end of day processes, and is robust, so that I can automate end of day file transfer processes, and not worry about this process breaking.

● As an IT manager, I need to know exactly what specifications to give to our income management supplier so that they can build it for us correctly, first time.

● As a procurement manager, I need to prepare the best possible tenders so that I can secure the best deal for my local authority.

● As a procurement manager, I want more of my transactions to go through a single provider (rather than being split between multiple providers), so that I benefit from our economies of scale and secure cheaper rates.

● As a business analyst, I need to understand all the features of GOV.UK Pay and where it sits in the payment journey, so I can assess whether it meets our needs and how it works with our other systems.
Appendix 1b - User Needs identified in User Research carried out by Hackney Council

The user needs in the linked document relate to a separate Discovery project done by the London Borough of Hackney, not as part of the MHCLG funded Discovery. They are shared here with the kind permission of Hackney Council.

https://docs.google.com/spreadsheets/d/1hP8KLc4r1_3eFpaiyQ57ZVNGKroc_035PxKdZB1Y8Qk/edit?usp=sharing

Appendix 2 - Survey questions

- Are you answering on behalf of the Council, or a specific service within the Council?
- How many online payment service suppliers does the Council use?
- Is the Council already using GOV.UK Pay for any services?
- Is your online payments system part of your main Income Management System?
- Does your current Payment system handle other incoming payment types, e.g. Phone payments, cash payments?
- How long does it take to procure a new payments system, in your experience?
- What one-off costs are involved in procuring a new payments system? e.g. set-up costs or year 1 costs
- What are the annual licensing costs for the system?
- Cost of additional modules, e.g. Direct Debits
- How much developer time does it take to integrate your services with a new Payment system?
- Do you have in-house developers that do this work, or would it be contracted out?
- What are the support costs per year and to whom are they paid?
- Does your supplier charge a fee for maintaining PCI compliance?
- Do you request changes from your supplier?
Appendix 3 - Local Authority Payment Processes and Pain Points

https://docs.google.com/spreadsheets/d/18VI6wkWo-D938jHgzLzwHEM_SaUE6VtA7ggalgNs3jQ/edit?usp=sharing
Appendix 4 - Payment system screen shots used in NELC user research sessions

Online Payments

Payment For: Council Tax
Account Number *

Continue Reset Back

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WARNING - This website is for internal testing only. You cannot buy or pay for goods or services here.

Card Number *

Expiration Date *

Security Code *

Continue Back Reset

Note: Clicking on the links below will open a new browser window.

MasterCard SecureCode
Verified by Visa

Learn more learn more
### Payment Information

**Council Tax**

Please enter your account number:

- **Council Tax Reference**: 

Name of the Council Tax account payee:

- **Council Tax Account Payee**: 

First line of address as shown on the Council Tax account:

- **Council Tax Address 1**: 

Postcode of the property as shown on the Council Tax account:

- **Council Tax Postcode**: 

**Amount**: £0.00

---

### Council Tax Payment

Please note: information on this page will time-out after 15 minutes of inactivity

* = Mandatory Field

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<th>Payment Entry</th>
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</tr>
<tr>
<td>Other Invoices</td>
<td>Reference *</td>
</tr>
<tr>
<td>Business Rates</td>
<td></td>
</tr>
<tr>
<td>Licences</td>
<td></td>
</tr>
<tr>
<td>Building Control</td>
<td>Amount (£) in 0.00 format *</td>
</tr>
<tr>
<td>Other Payments</td>
<td></td>
</tr>
</tbody>
</table>

- **Name**: 

  - **House No**: 
    - **OR House Name**: 

- **Street**: 

- **Area**: 

- **Town**: 

- **County**: 

- **Postcode**: 

---
Appendix 5 - Payment system screen shots used in Publica user research sessions
## Appendix 6 - Discovery activity timeline data

<table>
<thead>
<tr>
<th>Date</th>
<th>Milestone Title</th>
<th>Description or Activity</th>
</tr>
</thead>
</table>
| 15/01/2019      | Project kick-off| Agile for Teams training  
 Kick -off meeting  
 Created Slack team  
 Created Trello board |
| 04/02/2019      | Sprint 1        | Catch-up call (NELC, GDS, Publica)  
 Finance mapping workshop at NELC  
 Conference call with GDS economist  
 NELC user research session with staff members  
 Show & Tell #1 |
| 18/02/2019      | Sprint 2        | Research call NELC/GDS  
 GDS research visit to Cotswold DC  
 GDS research call with Clackmannanshire  
 GDS/NELC research visit to Barnsley  
 Show & Tell #3 |
| 04/03/2019      | Sprint 3        | Research call NELC/GDS  
 GDS research visit to Cotswold DC  
 GDS research call with Clackmannanshire  
 GDS/NELC research visit to Barnsley  
 Show & Tell #3 |
| 29/03/2019      | Sprint 4        | NELC research call with Allerdale  
 GDS research visit to Southwark  
 Insights & Outputs meeting (London)  
 Publish Discovery report |